



SINCE 1990

NEWSLETTER

No.56

This Newsletter is published four times a year, e-publication only.

April 2006

THE JAPAN SOCIETY OF WASTE MANAGEMENT EXPERTS

Dear Waste Management Experts

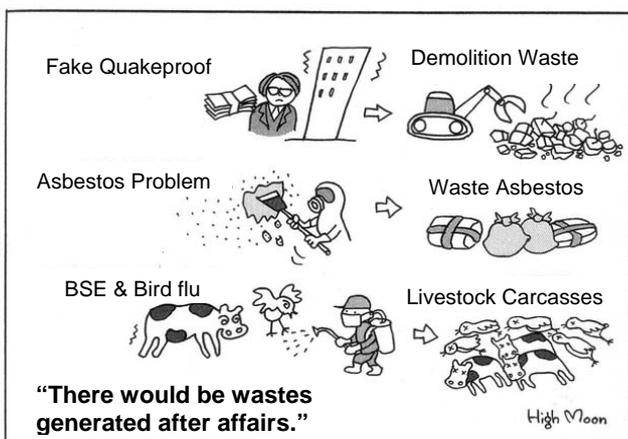
The cherry blossom front is just going up through Japan, following fresh green leaves. Thanks to colder winter, less pollen dispersal has relieved hey fever patients who feel gloomy during such a nice season.

Asbestos problem becomes one of the most important environment issues in Japan. In last December, *Asbestos Victims Relief Law* was established and some asbestos control related laws such as *Air pollution Control Law* were amended. The widespread use of asbestos in the last century has brought about serious health hazard in this century. We have to struggle with these negative legacies. So was PCB. Now PCB wastes detoxification facilities have been constructed as a national project in Japan and some are already on operation, reported briefly in this Newsletter.

Garbage reduction should be given first priority in municipal waste management. In this context, the amount of plastic shopping bags is not negligible among several options. A successful activity in a municipality is introduced in this issue. As the introduction of Japanese ODA in SWM, a technology transfer to the Philippines and some results are reported by a JICA expert.

The annual conference of JSWME this year is going to be held coming November 20-22, 2006, at Kitakyushu International Conference Center, Kitakyushu.

(Hideo Azuma)



Comments by High Moon: "Actually, it's not easy to deal with the aftermath." Illustrated by Prof. Hiroshi Takatsuki (Taka-tsuki literally means "High Moon".)

Brief note on SWM in Japan The PCB Waste Processing Facility for Tokyo Block Completed

In November 2005 the Tokyo PCB Waste Treatment Facility was completed. The facility, constructed at the Inner Central Breakwater Landfill site at Tokyo bay, will safely and reliably dispose of waste from the Tokyo metropolis and three prefectures (Saitama, Chiba and Kanagawa). The PCB waste, contained in high-tension transformers, high-tension capacitors, fluorescent light stabilizers and insulation oil in pole-mounted transformers, is scheduled to be treated using chemical treatment methods at a rate of approximately 2 tons per day, an average of 4,400 tons over a ten year period.

Since 1974, the production and use of PCB in Japan has been prohibited. The PCB used for various things before that period has accumulated because of insufficient disposal methods, thus the issue of PCB waste has come to be a responsibility for every enterprise. However, as a result of the 30 year, long term storage period, we are now in a situation whereby some PCB wastes has been lost or is unaccounted for. For this reason "the Law for the Promotion of the Environmentally Sound Destruction of PCB Waste" was introduced in 2001, obliging all enterprises to treat their PCB waste by 2016. The government funded JESCO public company was established and is currently operating PCB treatment facilities in five locations within Japan. The Tokyo PCB treatment facility is the third to be built after the facilities in Kitakyushu city and Toyota city, and the treatment facilities in Osaka city and Hokkaido are scheduled to be completed during 2006.

One of the methods of treating PCB prescribed by the Waste Management and Public Cleansing Law is high temperature incineration and approximately 5,000 tons of liquid PCB was incinerated about 20 years ago by PCB manufacturers. However, because it was difficult for the local people and municipalities to reach an agreement regarding incineration, the 5 treatment facilities use chemical detoxification methods (antichlor method using sodium, hydrothermal oxidation method etc). Collection and transportation of PCB wastes are also strictly monitored and controlled through safe disposal. As a result of this, treatment costs are high. For example, it will cost 100-200 USD/kg or more to treat insulation oil.

(Hideo Azuma)



JESCO's Tokyo PCB Waste Treatment Facility

**Japan's ODA on SWM :
Dispatching of Individual Expert for Solid Waste
Management in the Philippines
- Key Technical Cooperation Scheme of Japan-**

1. Introduction

As mentioned in No. 44 of this News Letter, "Technical Cooperation Project" is one of the JICA's main types of overseas activities. Taking a results-oriented approach, Japan and a recipient country pool their knowledge, experience, and skills to resolve specific issues within a certain timeframe. In implementing the technical cooperation project, JICA adopts various cooperation tools including dispatching experts to provide technical support. So far, a number of experts in the field of solid waste management (SWM) have been dispatched to the developing countries by JICA to attain practical improvement. The latest case in point is that from November 2004 to March 2006, whereby a long term Japanese expert on SWM was dispatched by JICA to the National Solid Waste Management Commission (NSWMC) of the Philippines to provide technical and administrative advice. The following shows the mission and outcomes of the dispatching of the expert.

2. Solid waste issues and the administrative framework in the Philippines

Pollution caused by municipal and industrial solid wastes is one of the most serious environmental concerns in the Philippines not only in Metro Manila but also in other Local Government Units (LGUs). SWM has become a serious nationwide concern to be solved urgently.

In July 2000, the Senate and House of Representatives enacted Republic Act No. 9003 (The Ecological Solid Waste Management Act of 2000). The act requires the National Solid Waste Management Commission (NSWMC) to be established and to carry out suitable SWM nationwide. The provisions of the act incorporate a fundamental SWM system and techniques to handle the functional elements of ESWM, i.e. generation, collection,

storage, processing, transfer and transport and final disposal. The act clearly defines that SWM is inherent responsibility of LGUs.

3. Request to Dispatch an Individual Solid Waste Management Expert

JICA has been providing assistance to the Philippines in the field of SWM and environmental protection and management through the implementation of various kinds of activities such as development studies, dispatch of experts and provision of equipment. In 2002, the NSWMC requested the dispatch of a SWM expert to promote the new SWM system under the new act. Taking into consideration the urgency and magnitude of the SWM problem in the Philippines, the Government of Japan agreed to dispatch a SWM expert for this purpose. Three-year technical assistance by JICA Expert to the NSWMC/The secretariat completed in this March.

4. Major Activities of the Expert

The major activities of the expert are summarized as follows;

- To transfer technologies for SWM to key persons of NSWMC.
- To assist the formulation of the human resource development plan to improve the management system of NSWMC
- To assist the preparation of the National Solid Waste Management States Report and the National Solid Waste Management Framework.
- To conduct a consultation for the organizational reinforcement of NSWMC and to accelerate the introduction of SWM facilities in the LGUs.
- To assist the formulation of a guideline for sanitary landfill.
- To assist for the formulation of a guideline for safety closure of disposal sites.
- To assist for the preparation of technical seminars on SWM.

SWM of the Philippines reached to a historical turning point in February 2006. The act prohibits the continuous use of open dumpsites and provides that the LGUs have to adopt a more environmentally secure disposal method, i.e. sanitary landfill. The target date to achieve full implementation of the closure of all controlled dump facilities nationwide is February 2006. The SWM in the Philippines, well known for Smoky Mountain, will improve step by step.

5. Outcomes by the Activities of the Expert

As mentioned above, the expert conducted a lot of technical advices and consultations. As well the following manual and guidebooks have been elaborated by the expert as the key outcomes of the activities.

- Guidebook for Safe Closure of Disposal Site
- Technical Guidebook on Solid Waste Disposal Design and Operation
- National Solid Waste Management Framework



Output of the Technical Assistance for the Philippines
(Takashi Goto)

**Japanese Municipalities on the Move
- Efforts to Reduce Plastic Shopping Bags through “My Bag Campaign” in Hino City -**

It is estimated that the number of plastic shopping bags consumed in Japan reaches 30.5 billion in a year, or 600 bags per household. Most of them are disposed of as waste. Since they are deemed as a symbol of one-way products, its reduction is regarded as the model of a new lifestyle without generating waste or a commodity supply system without producing or selling something that eventually becomes waste. To cope with this issue, Hino City has been carrying out a “My Bag Campaign” on the fifth of every month for two years since July 2003 in collaboration with the local residents so that the people were encouraged not to use plastic shopping bags but to bring their “my bags”.

On every My Bag Day, voluntary campaign supporters gathered in front of 13 main supermarkets and explained

about the campaign or distributed fliers to the customers for four hours. Also, the rate of people with “my bags” and the rate of people who refused the plastic shopping bags were studied every other months at the entrance of all the shopping centers.

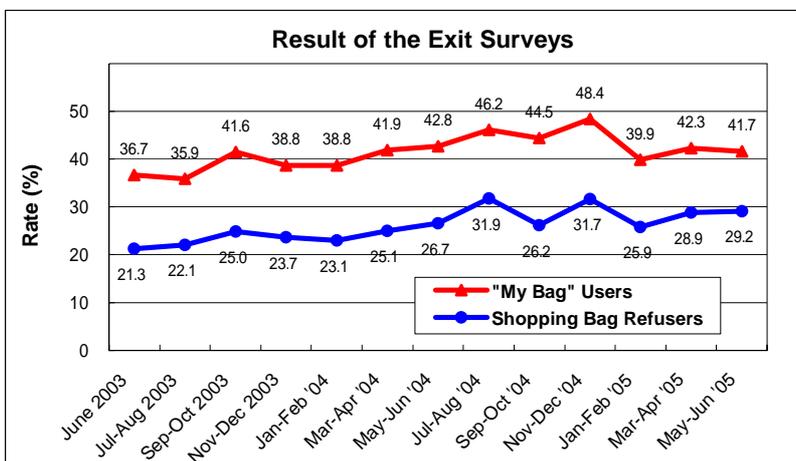
According to the study result in November 2004, the rate of people who knew about the My Bag Campaign rose to 91.5%, and the rate of people who consider that they should have “my bags” when shopping rose to 92.5%. On the other hand, the rate of people who refused plastic shopping bags was only about 25%, which implies that although people’s way of thinking has changed, their behavior largely remained unchanged. As far as plastic shopping bags were provided free of charge, it is clear that the My Bag Campaign has only limited effect.



Shoppers and Campaign supporters promoting the use of “My Bags”

Consequently, the city decided in May 2004 to start charging a fee for plastic shopping bags by the termination of the campaign. Since businesses, being afraid of losing customers, are reluctant to charge for the bags, all the business entities in the city should start at once. Raising awareness should be promoted more by the My Bag Campaign and other educational activities in order to build public consensus, and it must convince businesses that the general public is ready to accept the fee for the bags. To this end, the city drafted a plan in January 2005 whereby the city promotes the introduction of the bag fee as its policy, the business entities cooperate with the city on their own, and the city disseminates the draft plan to the residents and gets their understanding. The city approached the supermarkets located in the city seeking their cooperation for the draft plan, and more than half of the supermarkets agreed to the draft plan on condition of simultaneous introduction of the bag fee in the entire city.

In April 2005, the Government of Japan announced the policy to introduce the bag fee. This will facilitate the city’s effort to



materialize the plan, and it will further support the national policy.

The avoidance of packaging waste, which is the major component of domestic waste, is the key to pursue zero waste. Therefore, not only plastic shopping bags but also waste of other types of containers and packages must be reduced. At a national level, the Containers and Packaging Recycling Law is under review and is to be amended during the current Diet session to stipulate the plastic shopping bag fee. The city will continue to address the issue of plastic shopping bags so as to extend its waste avoidance movement to other container and packaging waste.

(Masaaki Hara)

**Journal of the Japan Society of Waste
Management Experts, Vol. 17, No.2 (March, 2006)**

Recent issues of the Journal of JSWME contain the following articles. The articles are written in Japanese with the abstract in English.

Paper

Monitoring Marine Debris Using Disposable Lighters as an Indicator

Shigeru Fujieda, Azusa Kojima and Haruyuki Kanehiro

Alkaline Hydrothermal Dechlorination of Chlorobenzene in Transformer Oil

Yuki Yamasaki, Atsushi Kishita, Kohjiro Kodaka, Fangmin Jin and Heiji Enomoto

Evaluation of the Microorganism Adsorptive Abilities of Resins Containing Pyridinium Groups Prepared from Foam Polystyrene

Shigeru Morimura, Kai Liu, Toru Shigematsu, Tomonari Ogata, Takamasa Nonaka and Kenji Kida

Durability Evaluation of Geomembrane Liners Using an Indoor Accelerated Exposure Experiment and an Outdoor Exposure Experiment for 10 Years: Effects on Durability of the Protective Covering

Takashi Harada, Shigeyoshi Imaizumi and Itaru Nishizaki

Factors Determining use of Compost in Suburban Areas by Farmers

Noboru Tanikawa, Toru Furuichi, Akihiro Tokai, Kazuei Ishii and Yoko Ohta

Glass Bottle Cullet Use in an Ash Melting Furnace

Hidemi Koyama, Masayuki Kobayashi, Sadaharu Shirako, Makoto Nonomura and Masayuki Horio

Carbonization of Johkasou Sludge Using a Continuous-type Pilot-scale Plant

Hiroyuki Katoh, Takao Watanabe, Hideaki Ohmori, Kiyoshi Kawamura and Yoshiaki Makino

Efficient Methane Fermentation System with Thermal Treatment for Cow Manure

Yutaka Yoneyama, Akinori Nishii, Masaaki Ishimoto, Noriko Yamada and Takayuki Suzuki

**Waste Management Research
Vol. 17, No.2 (March 2006)**

Preface

The Request for the Cooperation of the Members in Order to Restore the Finances of JSWME

Yoshihiro Ide

Special Issues: 3R Initiative and Material Cycles in Asia

An Economic Analysis of the 3Rs and International Material Circulation

Eiji Hosoda

Progress in the 3R Initiative

Hiroaki Takiguchi

E-waste Issues in Asia

Atsushi Terazono

The Global Metal Recycling Business, with a Focus on China

Kazuaki Shimada

Toward an Appropriate Asian Strategy for the Control of International Trade in Recyclable Resources

Michikazu Kojima

Current Members of JSWME as of December 28, 2005

(The figures in parenthesis indicate the difference from September 30, 2005)

Regular Members	3,283	(-136)
Students	275	(-52)
Non-Japanese Member	94	(-8)
Public Institutions	109	(-2)
Supporting Members	171	(-5)
Individuals of NPOs	4	(0)
Total	3,936	(-203)

NEWS LETTER NO.56, April 2006

Published by Prof. Kazuo Yamamoto, President,
The Japan Society of Waste Management Experts

Edited by Prof. Yasushi Matsufuji, Chairman,

International Relations Committee

Buzen-ya Bldg. Shiba 5-1-9, Minato-Ku,

Tokyo 108-0014, Japan

Phone: (+81) 3-3769-5099

Fax: (+81) 3-3769-1492

<http://www.jswme.gr.jp/>

e-mail. international@jswme.gr.jp

Everyone can find the latest issue of NEWSLETTER and recent back numbers at JSWME Homepage above. Readers who want to subscribe e-NEWSLETTER can receive it by e-mail with a PDF file on request.